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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,111

09/19/2006

Hermann Randecker

304-848

4133

30448

7590

05/09/2008

AKERMAN SENTERFITT

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EXAMINER

HOWELL, DANIEL W

ART UNIT

PAPER NUMBER

3726

MAIL DATE

DELIVERY MODE

05/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,111	Applicant(s) RANDECKER ET AL.	
	Examiner Daniel W. Howell	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10-4-05, 12-20-05</u> . | 6) <input type="checkbox"/> Other: ____. |

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1. Claims 2, 4-14, 16, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2 and 5 improperly sets forth a range within a range. Uses of phrases beginning “in particular,” “preferably,” or “particularly” do not make it clear if certain structure is present or not. Claims 6 and 20 must clearly set forth if the slot is U-shaped or not. Claim 7 must state if the coating is for wear resistance or not. Claim 10 must state if the coating is from metallic hard material or not. Claim 11 must state if the material is a light metal nitride or not. Claim 16 must state if the regrinding step is present or not.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over German 3314718 in view of Nuzzi et al (6135681). Figures 2a and 2b of German ‘718 show a single-lip gun drill having a cutting edge 40 and an adjacent chip forming/breaking groove 38. The German reference does not appear to give any explicit details about the groove. Nuzzi et al shows a cutting edge 64 and an adjacent U-shaped groove 75 for forming a positive rake angle 80. See column 6, lines 40-51, and figure 8. The positive rake angle 80 helps form the chips, and the U-shaped groove aids in breaking the chips. As disclosed at column 7, lines 19-29, the tool may be coated with suitable coatings, including TiAlN. Note that Nuzzi et al also states that various combinations of these or other coatings can be used to accommodate numerous applications. It is considered to have been obvious to have provided German ‘718 with the U-

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shaped groove having a positive rake angle as taught by Nuzzi et al in order to greatly facilitate chip formation and breakage (column 6, line 43, Nuzzi et al), and to provide German '718 with the coating and layers of coatings of Nuzzi et al in order to provide hardness and edge retention qualities. Regarding claim 16, it is considered to have been obvious to have provided the coating after resharpening or regrinding, as those operations would otherwise remove the coating. While the angle 80 as shown in figure 8 may be measured as being about 16 degrees, and the chip break surface of Nuzzi et al is a certain distance from the cutting edge, it has been held that patent drawings are not to be taken as drawn to scale unless the reference states that it is to scale. It is considered to have been obvious to have experimented with various rake angles and distances and to have provided a value of between 15 and 25 degrees, and to have provided a distance of between .3 and .6 mm, depending on the particular characteristics of the material being drilled.

4. Any inquiry concerning the content of this communication from the examiner should be directed to Daniel Howell, whose telephone number is 571-272-4526. The examiner's office hours are typically about 10 am until 6:30 pm, Monday through Friday. The examiner's supervisor, David Bryant, may be reached at 571-272-4475.

In order to reduce pendency and avoid potential delays, Group 3720 is encouraging FAXing of responses to Office actions directly into the Group at FAX number to 571-273-8300. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Daniel Howell of Art Unit 3726 at the top of your cover sheet.

/Daniel W. Howell/

Primary Examiner, Art Unit 3726